

CLAIM AMENDMENTS

Claims 1-21 (canceled).

Claim 22 (new): A light tube for a cold electrode fluorescent lamp, comprising:

a light tube body having a first end portion, a second end portion, and a spiral portion extended between said first and second end portions, wherein said light tube body contains an inert gas, a mercury substance and a layer of phosphor coated on an inner surface of said light tube body;

a first electrode, having an enlarged first surface area, disposed at said first end portion in said light tube body, adapted for connecting to a first terminal of electricity;

a second electrode, having an enlarged second surface area, disposed at said second end portion in said light tube body, adapted for electrically connecting to a second terminal of electricity for emitting electrons to excite said mercury substance for conducting said electrons to said first electrode as an electric loop, wherein said excited mercury substance emits ultra violet rays causing said phosphor coating to generate visible light; and

an activated gas absorber, made of zirconium-vanadium-iron alloy, formed at each of said first and second electrodes at said first and second surface areas thereof for absorbing oxygenic gas within said light tube body, wherein said activated gas absorber is made from a zirconium-vanadium-iron gas absorber, which is activated at an activation temperature of 390 degrees Celsius, integrally coated on said surface area of said respective electrode to form an integral electrode.

Claim 23 (new): The light tube, as recited in claim 22, wherein each of said first and second electrodes comprises a single layer plate defining said surface area thereon that said activated gas absorber is coated on said single layer plate.

Claim 24 (new): The light tube, as recited in claim 22, wherein each of said first and second electrodes comprises a two-layer plate defining said surface area thereon that said activated gas absorber is coated on said two-layer plate.

Claim 25 (new): The light tube, as recited in claim 22, wherein each of said first and second electrodes comprises a cylindrical tube defining said surface area thereon that said activated gas absorber is coated on said cylindrical tube.

Claim 26 (new): The light tube, as recited in claim 22, wherein each of said first and second electrodes comprises a spiral member having a constant cross section along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.

Claim 27 (new): The light tube, as recited in claim 22, wherein each of said first and second electrodes comprises a spiral member having a cross section varying along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.

Claim 28 (new): A cold electrode fluorescent lamp for illumination, comprising:

a housing;

a base for supporting said housing, having a first terminal and a second terminal insulated from said first terminal for electrically connected to voltage;

a light tube, which is disposed in said housing, having a first end portion, a second end portion, and a spiral portion extended between said first and second end portions, wherein said light tube contains an inert gas, a mercury substance and a layer of phosphor coated on an inner surface thereof;

a first electrode, having an enlarged first surface area, disposed at said first end portion in said light tube, electrically connecting to said first terminal;

a second electrode, having an enlarged second surface area, disposed at said second end portion in said light tube, electrically connecting to said second terminal for emitting electrons to excite said mercury substance for conducting said electrons to said first electrode as an electric loop, wherein said excited mercury substance emits ultra violet rays causing said phosphor coating to generate visible light;

an igniter, which is disposed in said base, electrically connected to said first and second terminals, for driving said first and second electrodes to function; and

an activated gas absorber, made of zirconium-vanadium-iron alloy, formed at each of said first and second electrodes at said first and second surface areas thereof for absorbing oxygenic gas within said light tube body, wherein said activated gas absorber is made from a zirconium-vanadium-iron gas absorber, which is activated at an activation temperature of 390 degrees Celsius, integrally coated on said surface area of said respective electrode to form an integral electrode.

Claim 29 (new): The cold electrode fluorescent lamp, as recited in claim 28, wherein said housing further has an air passage communicating an interior of said housing with an exterior thereof for balancing an interior pressure of said housing and for dissipating heat from said light tube.

Claim 30 (new): The cold electrode fluorescent lamp, as recited in claim 28, wherein said housing is sealedly mounted on said base for maintaining heat from said light tube.

Claim 31 (new): The cold electrode fluorescent lamp, as recited in claim 29, wherein each of said first and second electrodes comprises a single layer plate defining said surface area thereon that said activated gas absorber is coated on said single layer plate.

Claim 32 (new): The cold electrode fluorescent lamp, as recited in claim 30, wherein each of said first and second electrodes comprises a single layer plate defining said surface area thereon that said activated gas absorber is coated on said single layer plate.

Claim 33 (new): The light tube, as recited in claim 29, wherein each of said first and second electrodes comprises a two-layer plate defining said surface area thereon that said activated gas absorber is coated on said two-layer plate.

Claim 34 (new): The light tube, as recited in claim 30, wherein each of said first and second electrodes comprises a two-layer plate defining said surface area thereon that said activated gas absorber is coated on said two-layer plate.

Claim 35 (new): The light tube, as recited in claim 29, wherein each of said first and second electrodes comprises a cylindrical tube defining said surface area thereon that said activated gas absorber is coated on said cylindrical tube.

Claim 36 (new): The light tube, as recited in claim 30, wherein each of said first and second electrodes comprises a cylindrical tube defining said surface area thereon that said activated gas absorber is coated on said cylindrical tube.

Claim 37 (new): The light tube, as recited in claim 29, wherein each of said first and second electrodes comprises a spiral member having a constant cross section along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.

Claim 38 (new): The light tube, as recited in claim 30, wherein each of said first and second electrodes comprises a spiral member having a constant cross section along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.

Claim 39 (new): The light tube, as recited in claim 29, wherein each of said first and second electrodes comprises a spiral member having a cross section varying along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.

Claim 40 (new): The light tube, as recited in claim 30, wherein each of said first and second electrodes comprises a spiral member having a cross section varying along a longitudinal direction and defining said surface area thereon that said activated gas absorber is coated on said spiral member.